

WHAT IS CLAIMED IS:

1. A panel assembly for a display device, the panel assembly comprising:
a panel; and
5 a plurality of spacers formed on the panel for supporting the panel,
wherein the spacers have at least two different heights or at least two different
contact areas with the panel.
2. The panel assembly of claim 1, wherein the contact areas of the spacers
10 are circular or tetragonal.
3. The panel assembly of claim 1, wherein the spacers comprise a
plurality of first spacers and a plurality of second spacers having a height lower than the
first spacers and having a contact area wider than the first spacers.
15
4. The panel assembly of claim 3, wherein the height difference between
the first spacers and the second spacers is in a range of about 0.3-0.6 microns.
5. The panel assembly of claim 3, wherein the second spacers have a
20 length larger than the first spacers by 10-20 microns.
6. The panel assembly of claim 3, wherein the second spacers have a
length in a range of about 30-35 microns and the first spacers have a length in a range of
about 15-20 microns.
25
7. The panel assembly of claim 3, wherein a concentration of the second
spacers is about 200-600/cm² and a concentration of the first spacer is about 250-
450/cm².
8. The panel assembly of claim 1, wherein the spacers comprise a first
30 spacer, a second spacer having a height lower than the first spacer, and a third spacer
having a height equal to or lower than the second spacer.

9. The panel assembly of claim 8, wherein the height of the third spacer is equal to the height of the second spacer.

5 10. The panel assembly of claim 1, wherein the panel comprises a gate line and a data line transmitting electrical signals, a thin film transistor electrically connected to the gate line and the data line, and a pixel electrode connected to the thin film transistor.

10 11. The panel assembly of claim 1, wherein the panel comprises a plurality of color filters having different thicknesses.

12. A liquid crystal display, comprising:
a first panel;
a second panel opposite each other with a gap therebetween and including a
15 pixel electrode, a switching element connected to the pixel electrode, and a gate line and a data line connected to the switching element for transmitting electrical signals;
a plurality of spacers formed between the first panel and the second panel for maintaining the gap; and
a liquid crystal layer filled in the gap,
20 wherein the spacers have at least two different contact areas with the panels.

13. A method of manufacturing a liquid crystal panel assembly, the method comprising:
coating a photoresist on a panel;
25 light-exposing the photoresist through an exposure mask including an opening and disposed on the panel with a first distance;
light-exposing the photoresist through the exposure mask disposed on the panel with a second distance; and
developing the photoresist to form first and second spacers having different
30 heights or different contact areas with the panel.

14. The method of claim 13, wherein the photoresist is a negative type.

15. A method of manufacturing a liquid crystal panel, the method comprising:

5 coating a photoresist on a panel;

 light-exposing the photoresist through a first exposure mask including a first opening;

 light-exposing the photoresist through a second exposure mask including a second opening; and

10 developing the photoresist to form first and second spacers having different heights or different contact areas with the panel.

16. The method of claim 15, wherein the photoresist is a negative type.

15 17. A method of manufacturing a liquid crystal panel, the method comprising:

 coating a photoresist on a panel;

 light-exposing the photoresist through an exposure mask including a plurality of transmissive areas having different transmittances and a blocking area; and

20 developing the photoresist to form a plurality of spacers having different heights or different contact areas with the panel.

18. The method of claim 17, wherein the plurality of transmissive areas comprise a transparent area and a translucent area.

25

19. The method of claim 18, wherein the transparent area has an opening and the translucent area has a plurality of slits.

20. The method of claim 17, wherein the plurality of transmissive areas comprise a transparent area and a plurality of translucent areas having different transmittances.

5

21. The method of claim 17, wherein the photoresist is a negative type.